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VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER ANYA, CHARLES E	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/539,275

**Applicant(s)**

HANSEN ET AL.

**Examiner**

CHARLES E. ANYA

**Art Unit**

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____.                                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

### **DETAILED ACTION**

1. Claims 1-9 and 11-16 are pending in this application.

#### ***Specification***

Applicant has failed to provide antecedent basis for the claimed terminology “computer readable media” (claim 9). Therefore, the question becomes whether non-statutory embodiments would be fairly conveyed to one of ordinary skill given the terminology utilized. Therefore, the Specification is objected to under 37 CFR 1.75 (see MPEP 608.01(o)).

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claim 9 is directed to non-statutory subject matter.**

Given the specification, claim 9 is rejected under 101 as failing to be limited to embodiments which fall within a statutory category. In this instance, since the specification does not provide antecedent basis for the claimed “computer readable medium” it is not clear whether “computer readable medium” is directed to statutory subject matter.

Therefore, it would appear reasonable to interpret “computer readable medium” as transmission media or other forms of propagation medium and as such fails to be an appropriate manufacture under 35 USC 101 in the context of computer-related inventions.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3. Claims 1-9, 11, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (hereinafter referred to as AAPA pages 6-7 of the specification) in view of COMPONENTXCHNAGE: AN E-EXCHANGE FOR SOFTWARE COMPONENTS issued to Varadarajan et al. (pages 1-13) to Varadarajan et al.**

**4. As to claim 1, AAPA teaches a method to enable access to a function of a real world object represented as an Aspect Object in a Control System (Computerized System 10), which comprises an Aspect System (figures 1/2 page 6 lines 25 – 33, page 7 lines 1 – 33), the method comprising:**

calling an interface of the Aspect Object in the Control System, from a web client application (“...invoking a method...” page 6 lines 31 – 33, “...QueryAspectInterface...” page 7 lines 1 – 2);

requesting a representation of the Aspect Object and Aspects associated with the Aspect Object (Aspect Object 3 page 7 lines 17 – 24);

requesting a representation of an Aspect Category and an Aspect Type (Aspect Category 23 page 7 lines 22 – 29); and

requesting an Aspect System Object by the web client application wherein the function of the real world object is enabled for access (Aspect System Object 8 page 7 lines 17 – 20).

AAPA is silent with reference to calling an interface of an Aspect Object in a Control System, through the Internet or an intranet, from a web client application in an external client device, downloading to the client device a representation of the Aspect Object and Aspects associated with the Aspect Object, downloading to the client device a representation of an Aspect Category and an Aspect Type and downloading a representation of an Aspect System Object to the client device hosting the web client application wherein a function of the real world object is enabled for access.

Varadarajan teaches calling an interface of an Aspect Object in a Control System, through the Internet or an intranet (“...World Wide Web...” page 1 Abstract, “...HTTP POST method...” page 8 section 4.3), from a web client application in an external client device (“...interface of the matchmaking module...client query...” page 5 section 3, “...web-based query interface...” page 8 section 4.2/4.3), downloading to the

client device a representation of the Aspect Object and Aspects associated with the Aspect Object (“...component can used either by downloading it...” page 1 Abstract, “...component is downloaded to the client...” page 2 section 1), downloading to the client device a representation of an Aspect Category and an Aspect Type (“...returns those components...” page 5 section 3) and downloading a representation of an Aspect System Object to the client device hosting the web client application wherein a function of the real world object is enabled for access (“...component can used either by downloading it...” page 1 Abstract, “...component is downloaded to the client and later integrated in the client application...” page 2 section 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify of the system of AAPA with the teaching of Varadarajan because the teaching of Varadarajan would improve the system of AAPA by providing Web-based Aspect component exchanges and retrieval system for buying and selling of Aspect software components (Varadarajan page 11 section 6).

5. As to claim 2, Varadarajan teaches the method according to claim 1, wherein the web client application is a web browser (“...web-based query interface...browser” page 8 section 4.2)

6. As to claim 3, Varadarajan teaches the method according to claim 2, wherein the calling further comprises passing an interface type as a parameter (“...query...” page 4 section 2.2, “...client query...” Page 5 section 3).

7. As to claim 4, Varadarajan teaches the method according to claim 1, further comprising: initializing the Aspect Object in the client device and initializing the Aspect System Object in the client device (“...component...and integrated into the client application...” page 2 “...component...integrated in the client application...” page 2 section 1).

8. As to claim 5, Varadarajan teaches the method according to claim 1, further comprising: downloading first and second software components to the client device is with a web server (“...Java Servlets API...” page 8 sections 4.1/4.3: NOTE: Servlet API, contained in the Java package hierarchy javax.servlet, defines the expected interactions of a Web Server and a Servlet).

9. As to claim 6, Varadarajan teaches the method according to claim 1, further comprising: downloading an Aspect System Object, wherein downloading the Aspect System Object comprises matching the interface type with an interface type listed in the Aspect Category and the Aspect Type (“...best match...” page 2 section 1, “...Matchmaking involves comparing...” page 5 section 3, “...Matchmaking...” page 8 section 4.3).

10. As to claim 7, AAPA teaches the method according to claim 1, wherein a function of the real world object is a start, stop, open or close function (“...functions are open, close start...” page 7 lines 27 – 33).

11. As to claim 8, AAPA teaches the method according to claim 1, wherein the client device is a personal computer, a mobile phone, a handheld device or a Personal Digital Assistant (PDA) (“...the client...” page 2 section 1).

12. As to claim 9, see the rejection of claim 1 above.

13. As to claims 9 and 11, claims 9 and 11 are rejected for the same reason as claim 1 because claims 9 and 11 are computer program product and control system claims respectively of claim 1.

14. As to claim 12, see the rejection of claim 2 above.

15. As to claims 14 and 15, see the rejection of claims 7 and 8 respectively.

16. As to claim 16, see the rejection of claims 1 and 4 above.

**17. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (hereinafter referred to as AAPA pages 6-7 of the**



**specification) in view of COMPONENTXCHNAGE: AN E-EXCHANGE FOR SOFTWARE COMPONENTS issued to Varadarajan et al. (pages 1-13) to Varadarajan et al. as applied to claim 12 above, and further in view of U.S. Pat. No. 6,640,140 B1 issued to Lindner et al.**

18. As to claim 13, Varadarajan teaches the first and second software component (“...component can used either by downloading it...” page 1 Abstract, “...component is downloaded to the client...” page 2 section 1).

Lindner teaches the Control System according to claim 12, wherein the Control System comprise a web server, which handles the download of files to the client device (“...web server...” Col. 2 Ln. 51 – 58, Web Server 12 Col. 4 Ln. 20 – 29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Varadarajan and AAPA with the teaching of Lindner because the teaching of Lindner would improve the system of Varadarajan and AAPA by providing an industrial control or automation system for performing a control function relevant to an industrial control or automated system and for monitoring control system information and data associated with the control function (Lindner Col. 1 Ln. 6 – 14).

### ***Response to Arguments***

Applicant's arguments filed 7/10/09 have been fully considered but they are not persuasive.

Applicant argues in substance that (1) the AAPA and Varadarajan prior arts do not teach or suggest a method for enabling access to a function of a real world represented as an aspect object in a control system through a network such as the internet or an intranet utilizing a web client application in a client device external to the control system and (2) Examiner's motivation for combining the AAPA and Varadarajan prior arts is based on hindsight.

The Examiner respectfully traverses Applicant's arguments:

As to point (1), AAPA discloses (figure 1 page 6 and 7 of instant application) a client application accesses functions associated with an Aspect of an Aspect Object, the Aspect Object represents a real world object (Control System 11). The client application queries an Aspect Object for a reference to an interface that provides the function. The client application queries the Aspect Object by invoking a method (QueryAspectInterface) of a known interface of the Aspect Object. The AAPA does not however disclose the client application as accessing access to the function in the control system through **a network such as the internet or an intranet** utilizing a web client application in a client device external to the control system, hence the introduction of the Varadarajan prior art.

Varadarajan prior art discloses component (Aspect Based Component) **downloadable** and integrated into a client application by accessing the component **remotely over a network** (pages 1/2). The client application provides "web-based query interface" for component integrators to search for the components (pages 7 and 8).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (point 2), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As for 101 rejection, the cancelling of claim 10 does not eliminate the issue raised by the claimed "computer readable medium" because claim 9 includes "computer readable medium" and because page 4 lines 18-22 does not describe the claimed "computer readable medium", although "computer readable medium" is mentioned.

It is advised that Applicant amend the specification to describe the "computer readable medium".

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES E. ANYA whose telephone number is (571)272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Li B. Zhen/  
Primary Examiner, Art Unit 2194

cea.